

and a diol having a molecular weight of from about 60 to about 750; or  
(b) a diol having a molecular weight of from about 1,000 to about 4,000  
wherein, when the active hydrogen containing material does not include a molecular  
weight of from about 60 to about 750, the prepolymer is dispersed in water which  
includes a difunctional amine chain extender.

4. The polyurethane film according to Claim 3 wherein the diol having a molecular weight  
of from about 1,000 to about 4,000 is a polyoxypropylene diol having an ethylene oxide capping  
of from 0 to 25 percent.

10. The process according to Claim 9, wherein  
the diisocyanate is either:

- (a) an aliphatic diisocyanate; or
- (b) an aromatic diisocyanate selected from the group consisting of MDI, TDI, and  
mixtures thereof; and

the active hydrogen containing material is either:

- (a) a mixture of a diol having a molecular weight of from about 1,000 to  
about 4,000 and a diol having a molecular weight of from about 60 to  
about 750; or
- (b) a diol having a molecular weight of from about 1,000 to about 4,000  
wherein, when the active hydrogen containing material does not include a diol  
having a molecular weight of from about 60 to about 750, the prepolymer is  
dispersed in water which includes a difunctional amine chain extender.

15. The dispersion of Claim 13, wherein the mixture of diols is a mixture of a diol having a  
molecular weight of from about 1,000 to about 4,000 and a diol having a molecular weight of  
from about 60 to about 750.